



Dart Aerospace Ltd.  
1270 Aberdeen St  
Hawkesbury, ON  
K6A 1K7  
Canada

Tel (613) 632-5200

**D205-634-041**  
**Job Sheet 179966**



**Part No:** D205-634-041

**Job Qty:** 1 ea

**Part Name:** Replacement Skidtube with Standard Wearplates Fits LH or RH



**Part Weight:** 0 lbs

**Status:** Scheduled

**Priority:** Medium

**Job Created:** 6/27/18

**Job Tracking No:**

**Due Date:** 7/27/18

**Created By:** Jesse White

**Type:** Stock

**Description:**

**Note:** DWG D2580 REV H SHEETS 1,2,3,8 IPP Rev:N 02.08.28 FP was QC5 in Step 27; Added QC5 to Step 30 KJ IPP Rev P 10.02.19 per PAR09-043 EC verified by:DD IPP Rev. O 06.02.28 Added paperwork EC IPP Rev:P 07-07-09 SS Wearplates & Gaskets JLM IPP Rev:Q 10.12.01 as per chg003 DD ver:EC IPP REV:R 12.01.23 AS PER ECN11-684 VERF:EC IPP REV:S 17.12.08 REMOVE GASKET AS PER INTUITIVE INFO DD VERF:JFS

**Ship Via:**

### Bill of Materials



1270 ABERDEEN STREET  
HAWKESBURY, ON K6A 1K7  
CANADA  
TEL.: 1 613 632-5200  
Email: sales@dartaero.com  
www.dartaerospace.com

**Container No:** S095593



**Part:** D205-634-041

**Job No:** 179966

**Serial No/Batch:** S095593

**Revision:** H

**Inspector:**

**Exp Date:**

**Instructions:** TC STC SH96-88 Issue 3, FAA STC SR00563NY 08/08/11, EASA ST

| Job Routing |                     |       |            |          |           |         |                       |           |                  |
|-------------|---------------------|-------|------------|----------|-----------|---------|-----------------------|-----------|------------------|
| Op No       | Operation           | Qty   | Start Date | Due Date | Standard  |         | Workcenter/Supplier   |           | Sign-off         |
|             |                     |       |            |          | Setup hrs | Run hrs | Workcenter / Supplier | Lead Time |                  |
| 90          | Start up Operation  | 1 Ea  | 7/27/18    | 7/27/18  | 0.00      | 0.00    | Start Up Skid tubes   |           | 8 MGG            |
| 110         | CNC Bend Skid tubes | 1 pcs | 7/27/18    | 7/27/18  | 0.00      | 0.65    | CNC Bend Skid tube    |           | MGG              |
| 120         | Skid tubes          | 1 pcs | 7/27/18    | 7/27/18  | 0.00      | 2.89    | Skid tubes-2          |           | DD               |
| 130         | QC                  | 1 pcs | 7/27/18    | 7/27/18  | 0.00      | 0.00    | QC5                   |           | BE               |
| 140         | Skid tubes          | 1 pcs | 7/27/18    | 7/27/18  | 0.00      | 2.89    | Skid tubes-2          |           | DD BE DAS        |
| 150         | QC                  | 1 pcs | 7/27/18    | 7/27/18  | 0.00      | 0.00    | QC10                  |           | DAS 38           |
| 160         | QC                  | 1 pcs | 7/27/18    | 7/27/18  | 0.00      | 0.00    | QC5                   |           | 38 9-89          |
| 170         | HandFinish          | 1 pcs | 7/27/18    | 7/27/18  | 0.00      | 1.31    | HandFinish1           |           | DR 9-89 18-08-19 |
| 180         | Powdercoat          | 1 pcs | 7/27/18    | 7/27/18  | 0.00      | 0.34    | Powdercoat1           |           | UL 18-08-19      |
| 190         | QC                  | 1 pcs | 7/27/18    | 7/27/18  | 0.00      | 0.00    | QC3                   |           | 38 9-89          |
| 200         | HandFinish          | 1 pcs | 7/27/18    | 7/27/18  | 0.00      | 1.31    | HandFinish4           |           | BE 18-08-19      |
| 210         | QC                  | 1 pcs | 7/27/18    | 7/27/18  | 0.00      | 0.00    | QC5                   |           | AUG 17 2018 38   |
| 220         | Packaging           | 1 pcs | 7/27/18    | 7/27/18  | 0.00      | 0.00    | Packaging3-1          |           | 38 9-89          |
| 225         | DC                  | 1 pcs | 7/27/18    | 7/27/18  | 0.00      | 0.00    | DC                    |           | SEP 12 2018      |
| 230         | QC21-FG             | 1 Ea  | 7/27/18    | 7/27/18  | 0.00      | 0.00    | QC21                  |           | SEP 12 2018      |

Part Op 110 - 1-Bend as per program D2580.C on CNC Bender and Folio 16 2-Cut tubes as per Dwg. D2580 3- scribe batch# in Descriptions: aft end of tube

120 - 1- Deburr ends and remove bending marks 2- Prepare tube for welding as per QSI 004

A/R  
138874

140 - 1-Weld step D2576 as per Dwg. D2580 and QSI 004 2-Grind welds on step as per Dwg D2580 3- Insert D4202-1 spacer, swage as per QSI002 and trim/ grind flush per QSI002 and dwg. Hold x-bolt with DT9701 Use tube expander 1/2 x17G to start expansion and finish with 1/2 x 18G to achieve dwg dimension. 4-Drill holes for wearplates using DT 8217 & DT8937, 7.40" from most fwd saddle holes (ref only) Open holes to 19/64", adjust stopper not to hit web. Deburr 5-Drill pilot holes for aft cap using DT 8215 Open holes to 0.208". Deburr 6-Drill pilot holes for Tow ring using DT8091, open to .640" and Deburr

170 - Re-alodine tube as per QSI 005 section 4.1.2.1 do not acid etch and leave fwd cap out of solution.

180 - START TIME: 1:00pm OVEN TEMPERATURE: 325°F FINISH TIME: 1:30pm

200 - 1-Install inserts & wearplates as per Dwg. D2580. Use a drop of Sikaflex on insert holes before installing wearplates A/R Sikaflex-291 138874 Sikaflex expire date: 06/19 2-Coat D2594-3 O' rings with Petroleum Jelly and install on D2594-1 plugs as per Dwg D2580 3-Inspect for foreign object per QSI 024 4-Install 2855 Aft Cap as per Dwg D2580 and seal Fwd Step & Aft Cap with Sikaflex. Clean excess adhesive A/R Sikaflex-291 138874 Sikaflex expire date: 06/19 5-Wing Walk as per Dwg D2580 and QSI 005 4.4 Batch: 5098120

210 - Inspect Aft Cap, Fwd Step and Wing Walk of work to Current Step Inspect for Foreign objects per QSI 024

220 - Identify and pack for shipping as per PPPD205-634-041 Location: \_\_\_\_\_ PPP Rev: \_\_\_\_\_

225 - Photocopy D205-634 bluefile & type labels per PPP D205-634-041 CHG006

005016.

| Job BOM       |                         |               |                       |           |
|---------------|-------------------------|---------------|-----------------------|-----------|
| Part / Item   | Component Name          | Quantity      | Operation             | Container |
| D2580-1       | 205 Bent Tube           | 1 Ea (1 ea)   | 90-Start up Operation | 5093557   |
| D2576-3       | Step (Machining Detail) | 1 Ea (1 ea)   | 140-Skid tubes        | 5069014   |
| D4202-1       | Spacer                  | 20 Ea (20 ea) | 140-Skid tubes        | 5086226   |
| ALS7-1032-130 | Rivnut                  | 50 Ea (50 ea) | 200-HandFinish        | 5045668   |
| AN3-5A        | Bolt                    | 2 Ea (2 ea)   | 200-HandFinish        | 5095480   |
| AN3C4A        | Bolt                    | 50 Ea (50 ea) | 200-HandFinish        | 5060051   |
| D2594-1       | Plug                    | 16 Ea (16 ea) | 200-HandFinish        | 5101471   |
| D2594-3       | O-Ring                  | 16 Ea (16 ea) | 200-HandFinish        | 5084102   |
| D2855         | Cap                     | 1 Ea (1 ea)   | 200-HandFinish        | 50660108  |
| D3564-11      | Wearplate Aft           | 1 Ea (1 ea)   | 200-HandFinish        | 5080626   |
| D3564-13      | Wearpad Fwd             | 1 Ea (1 ea)   | 200-HandFinish        | 5081692   |
| D3564-5       | Wearplate Center        | 1 Ea (1 ea)   | 200-HandFinish        | 5089612   |
| D3564-9       | Wearplate Fwd           | 1 Ea (1 ea)   | 200-HandFinish        | 5080629   |
| NAS1149C0332R | Washer                  | 50 Ea (50 ea) | 200-HandFinish        | 5056493   |
| NAS1149D0332J | Washer                  | 2 Ea (2 ea)   | 200-HandFinish        | 5035396-3 |

2



**Job Allocations**

| Operation             | Component Part | Required | Inventory | Allocated |
|-----------------------|----------------|----------|-----------|-----------|
| 90-Start up Operation | D2580-1        | 1        | 16        | 0         |
| 140-Skidtubes         | D2576-3        | 1        | 34        | 0         |
|                       | D4202-1        | 20       | 748       | 0         |
| 200-HandFinish        | ALS7-1032-130  | 50       | 2,389     | 0         |
|                       | AN3-5A         | 2        | 194       | 0         |
|                       | AN3C4A         | 50       | 1,777     | 0         |
|                       | D2594-1        | 16       | 337       | 0         |
|                       | D2594-3        | 16       | 1,095     | 0         |
|                       | D2855          | 1        | 83        | 0         |
|                       | D3564-11       | 1        | 20        | 0         |
|                       | D3564-13       | 1        | 21        | 0         |
|                       | D3564-5        | 1        | 9         | 0         |
|                       | D3564-9        | 1        | 22        | 0         |
|                       | NAS1149C0332R  | 50       | 5,193     | 0         |
|                       | NAS1149D0332J  | 2        | 1,605     | 0         |

**Part Specifications**

Specifications could not be found.

Plex 6/27/18 9:05 AM dart.white.jesse

| ITEM | QTY<br>-041 | QTY<br>-045 | QTY<br>-047 | QTY<br>-048 | PART NUMBER                                                               | DESCRIPTION        |
|------|-------------|-------------|-------------|-------------|---------------------------------------------------------------------------|--------------------|
| 1    | X           |             |             |             | D2580-041                                                                 | SKIDTUBE ASSEMBLY  |
| 2    |             | X           |             |             | D2580-045                                                                 | SKIDTUBE ASSEMBLY  |
| 3    |             |             | X           |             | D2580-047                                                                 | SKIDTUBE ASSEMBLY  |
| 4    |             |             |             | X           | D2580-048                                                                 | SKIDTUBE ASSEMBLY  |
| 20   | 1           | 1           | 1           | 1           | D2500-1-190                                                               | EXTRUSION          |
| 21   |             |             | 16          | 16          | D2570                                                                     | BUSHING            |
| 22   | 1           | 1           | 1           | 1           | D2576-3                                                                   | STEP               |
| 23   |             | 4           |             |             | D2579                                                                     | SPACER             |
| 24   | 16          | 16          | 8           | 8           | D2594-1                                                                   | PLUG               |
| 25   | 16          | 16          | 8           | 8           | D2594-3                                                                   | O-RING             |
| 26   | 1           | 1           | 1           | 1           | D2596                                                                     | 205 WEB            |
| 27   | 1           | 1           | 1           | 1           | D2555                                                                     | AFT CAP            |
| 28   | 1           | 1           |             |             | D3554-5                                                                   | WEARSHOE           |
| 29   | 1           | 1           |             |             | D3554-9                                                                   | WEARSHOE           |
| 30   | 1           | 1           |             |             | D3554-11                                                                  | WEARSHOE           |
| 31   | 1           | 1           |             |             | D3554-13                                                                  | WEARSHOE           |
| 32   | 20          | 20          | 24          | 24          | D4202-1                                                                   | SPACER             |
| 33   |             |             | 1           |             | D4405-041                                                                 | WEARPLATE ASSEMBLY |
| 34   |             |             | 1           |             | D4405-043                                                                 | WEARPLATE ASSEMBLY |
| 35   |             |             |             | 1           | D5051-1                                                                   | FWD WEARPLATE      |
| 36   |             |             |             | 1           | D5051-3                                                                   | AFT WEARPLATE      |
| 50   | 50          | 50          |             |             | ALS7-1032-130<br>or AK57-1032-130<br>or AK54-1032-130<br>or AELS-1032-130 | INSERT             |
| 51   | 50          | 50          |             |             | AN3C4A                                                                    | BOLT               |
| 52   | 2           | 2           | 2           | 2           | AN3-5A                                                                    | BOLT               |
| 53   |             |             | 8           | 8           | AN4-45A                                                                   | BOLT               |
| 54   | 50          | 50          |             |             | NAS1149C0332R                                                             | WASHER (AN890C10L) |
| 55   | 2           | 2           | 2           | 2           | NAS1149D0332J                                                             | WASHER (AN890J10L) |
| 56   |             |             | 8           | 8           | MS21042-4                                                                 | NUT (OR MS21042L4) |

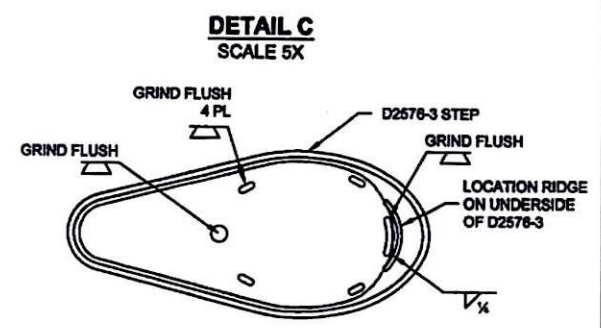
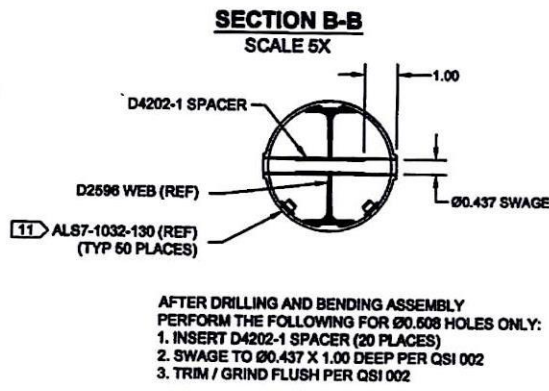
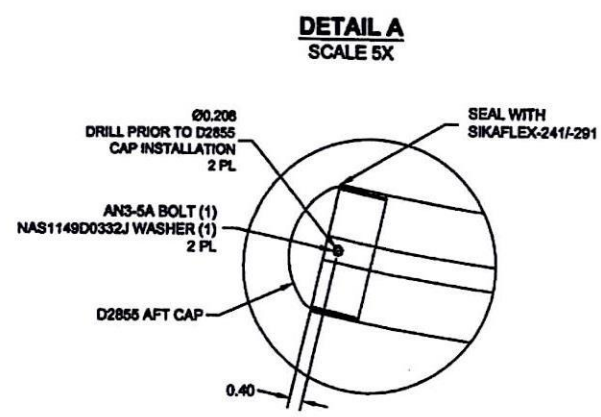
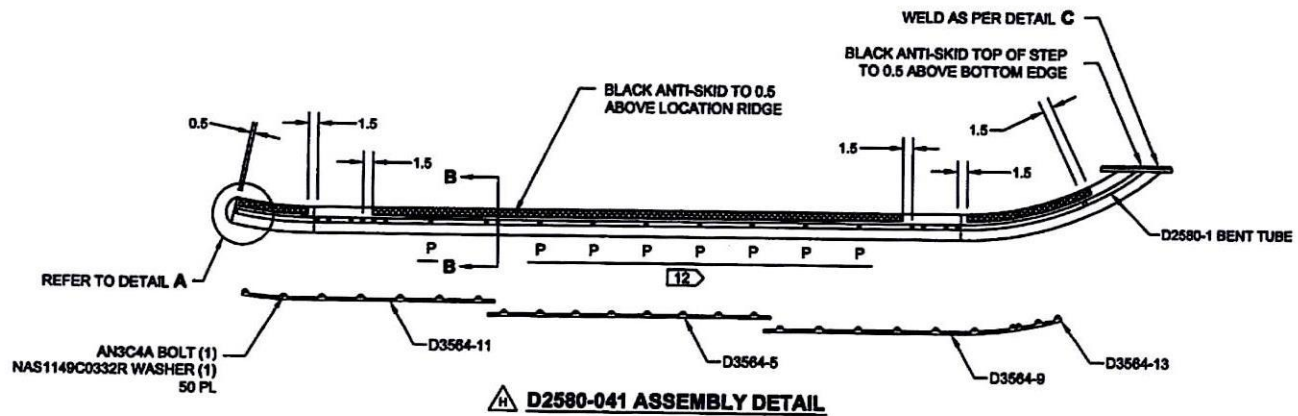
# **GENERAL NOTES:**

- 1) MATERIAL: N/A
- 2) FINISH: CHEMICAL CONVERSION PER DART QSI 005 4.1 PRIOR TO INSERTING D2596 WEB  
POWDER COAT (-041/-047/-049) GLOSS WHITE (REF 4.3.5.1) PER DART QSI 005 4.3  
POWDER COAT (-048) GREEN SANDTEX (REF 4.3.5.2) PER DART QSI 005 4.3  
BLACK ANTI-SKID PAINT AS INDICATED PER DART QSI 005 4.4.
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED.
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED.
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX.
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: D2580-041 = 33.7 lbs  
D2580-045 = 33.7 lbs  
D2580-047 = 45.1 lbs  
D2580-048 = 32.0 lbs
- 8) WELDING PER DART QSI 004.
- 9) INSERT D2596 WEB TO LOCATION SHOWN OFF AFT END OF SKIDTUBE AND BOND WEB INTO OUTER TUBE WITH NON-STRUCTURAL SIKAFLEX-241 ADHESIVE PER DART QSI 015 BEFORE BENDING. ENSURE HOLES LINE-UP.
- 10) BEND AS A SMOOTH RADIUS STARTING WITH A MAXIMUM CENTERLINE RADIUS OF 60 AND ENDING WITH A MINIMUM RADIUS OF 30. A MAXIMUM REDUCTION OF 0.200 IN DIAMETER IS ALLOWABLE IN THE BENT PORTION OF THE TUBE.
- 11) USE DART DRILL TEMPLATE DT8217 & DT8637 ONLY FOR D2580-041/-045 TO LOCATE AND DRILL Ø0.297 HOLES FOR WEARSHOE INSERTS. INSTALL ALS7-1032-130 PER SECTIONS B-B AND F-F (50 PLACES) AFTER FINISH. INSTALL AN3C4A BOLTS AND NAS1149C0332R WASHERS WITH SIKAFLEX-241-291.
- 12) INSERT D2594-1 PLUG C/W D2594-3 O-RING IN HOLES MARKED 'P' (BOTH SIDES OF TUBE) AFTER FINISH (16 PLACES FOR D2580-041/-045 AND 8 PLACES FOR D2580-047/-048)
- 13) IT IS ACCEPTABLE TO GRIND A RELIEF IN THE D2555 AFT CAP TO PREVENT INTERFERENCE WITH THE SPACER AT THIS LOCATION

|                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                           |     |          |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------|-----|----------|
| H                                                                                                                                                                                                                                                                                                                                                                                                                                                | SHEET: PL DELETE D3556-1/-5/-13 GASKETS, WEIGHTS UPDATED ACCORDINGLY. SHEETS 2 & 4 PICTORIAL UPDATE FOR REMOVAL OF GASKETS                                | SAD | 17.06.09 |
| G                                                                                                                                                                                                                                                                                                                                                                                                                                                | ADDED -048, -047 WEIGHT UPDATED PER DSI 9506                                                                                                              | AJS | 14.04.08 |
| F                                                                                                                                                                                                                                                                                                                                                                                                                                                | INCORPORATE DEO D2580-E-1 PER PART12-218                                                                                                                  | DC  | 13.06.20 |
| E                                                                                                                                                                                                                                                                                                                                                                                                                                                | ADD D2580-047 (ZN C4-7) AND D2580-7 (ZN B3-5); INCLUDED DEO D2580-D-1; REFORMATTED DRAWING TO CURRENT STANDARDS; DT8217 & DT8637 WAS TD2577-205 (ZN C4-1) | RF  | 11.06.21 |
| D                                                                                                                                                                                                                                                                                                                                                                                                                                                | CHANGE TO 55 WEARPLATES AND GASKETS, INCLUDE DEO 9124/ 9183                                                                                               | PH  | 07.04.06 |
| C                                                                                                                                                                                                                                                                                                                                                                                                                                                | REDRAWN, INCLUDED DEO 9084/ 9097                                                                                                                          | CP  | 06.08.28 |
| B                                                                                                                                                                                                                                                                                                                                                                                                                                                | AS MANUFACTURED                                                                                                                                           | DS  | 06.12.02 |
| A                                                                                                                                                                                                                                                                                                                                                                                                                                                | NEW ISSUE                                                                                                                                                 | DS  | 06.09.16 |
| REV.                                                                                                                                                                                                                                                                                                                                                                                                                                             | DESCRIPTION                                                                                                                                               | BY  | DATE     |
| DESIGN                                                                                                                                                                                                                                                                                                                                                                                                                                           | DS                                                                                                                                                        |     |          |
| DRAWN                                                                                                                                                                                                                                                                                                                                                                                                                                            | SAD                                                                                                                                                       |     |          |
| CHECKED                                                                                                                                                                                                                                                                                                                                                                                                                                          | <i>[Signature]</i>                                                                                                                                        |     |          |
| MFG. APPR.                                                                                                                                                                                                                                                                                                                                                                                                                                       | <i>[Signature]</i>                                                                                                                                        |     |          |
| APPROVED                                                                                                                                                                                                                                                                                                                                                                                                                                         | <i>[Signature]</i>                                                                                                                                        |     |          |
| DE APPR.                                                                                                                                                                                                                                                                                                                                                                                                                                         | <i>[Signature]</i>                                                                                                                                        |     |          |
| DATE                                                                                                                                                                                                                                                                                                                                                                                                                                             | 17.06.09                                                                                                                                                  |     |          |
| <b>DART AEROSPACE LTD</b><br>HAWKESBURY, ONTARIO, CANADA<br>DRAWING NO. D2580<br>REV. H<br>SHEET 1 OF 9<br>TITLE 205 SKIDTUBE ASSEMBLY<br>SCALE NTS<br><small>COPYRIGHT © 1996 BY DART AEROSPACE LTD<br/>THIS DOCUMENT IS UNCLASSIFIED AND IS AVAILABLE ON THE INTERNET WITHOUT CHARGE<br/>IT IS NOT TO BE USED FOR ANY PURPOSES OR COPIED OR REPRODUCED IN ANY FORM OR BY ANY MEANS WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.</small> |                                                                                                                                                           |     |          |

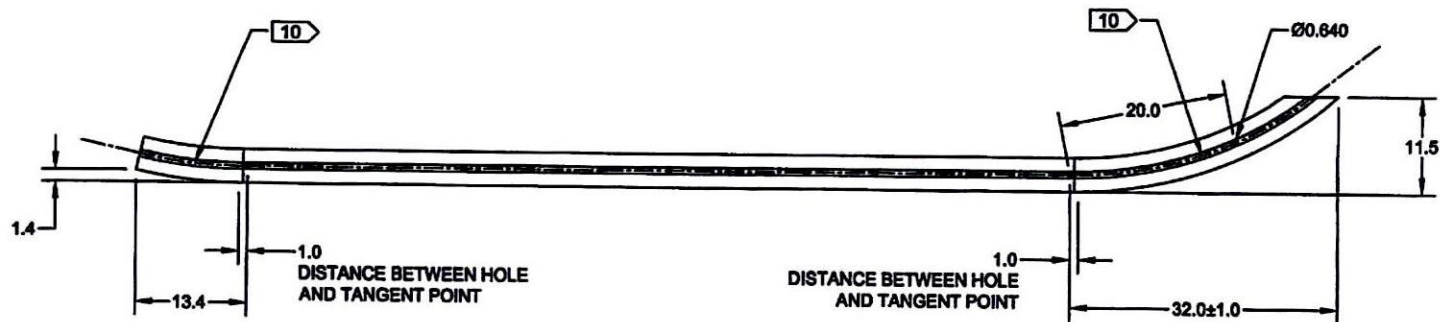
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|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------|----------------------------------------|--------------|
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| DRAWN                                                                                                                                                                                   | SAD                | HAWKESBURY, ONTARIO, CANADA            |              |
| CHECKED                                                                                                                                                                                 | <i>[Signature]</i> | DRAWING NO.                            | REV. H       |
| MFG. APPR.                                                                                                                                                                              | <i>[Signature]</i> | D2580                                  | SHEET 2 OF 9 |
| APPROVED                                                                                                                                                                                | <i>[Signature]</i> | TITLE                                  | SCALE        |
| DE APPR.                                                                                                                                                                                | <i>[Signature]</i> | 205 SKIDTUBE ASSEMBLY                  | NTS          |
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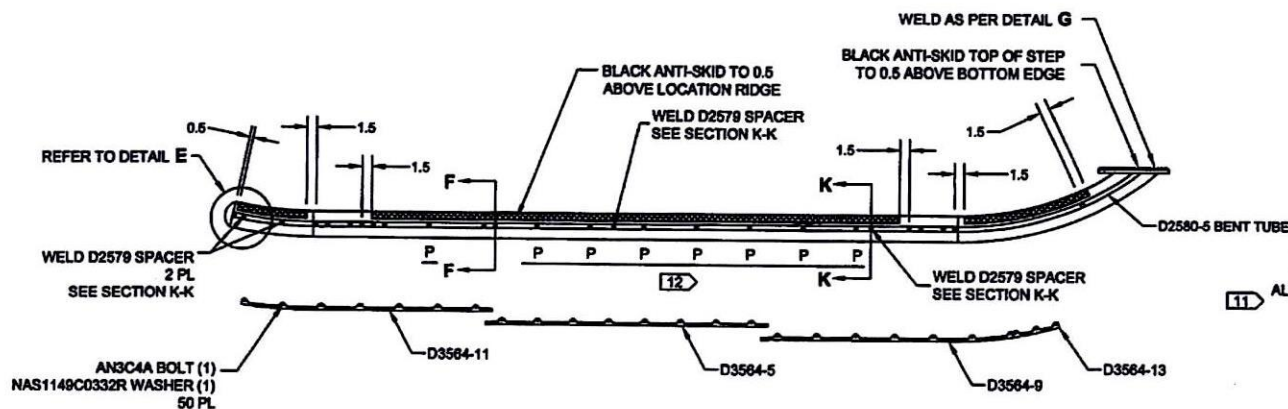


**D2580-1 BENT TUBE**  
(MAKE FROM D2580-101 TUBE)

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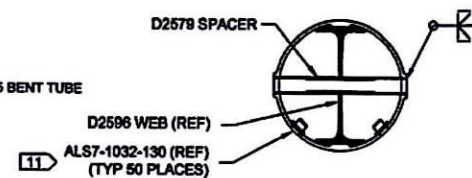
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| DRAWN      | SAD                |                                                                                                                                                                                                                                                               |              |
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| MFG. APPR. | <i>[Signature]</i> | D2580                                                                                                                                                                                                                                                         | SHEET 3 OF 9 |
| APPROVED   | <i>[Signature]</i> | TITLE                                                                                                                                                                                                                                                         | SCALE        |
| DE APPR.   | <i>[Signature]</i> | 205 SKIDTUBE ASSEMBLY                                                                                                                                                                                                                                         | NTS          |
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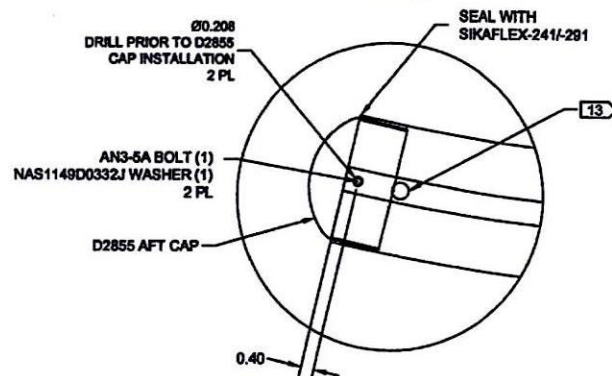
**D2580-045 ASSEMBLY DETAIL**

**SECTION K-K  
SCALE 5X**

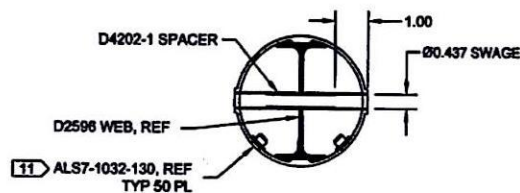


AFTER DRILLING AND BENDING ASSEMBLY  
PERFORM THE FOLLOWING FOR Ø0.508 HOLES ONLY:  
1. CHAMFER HOLE 0.050 X 45°  
2. INSERT D2579 SPACER (4 PLACES)  
3. WELD INTO PLACE AND GRIND FLUSH  
4. DO NOT CBORE

**DETAIL E  
SCALE 5X**

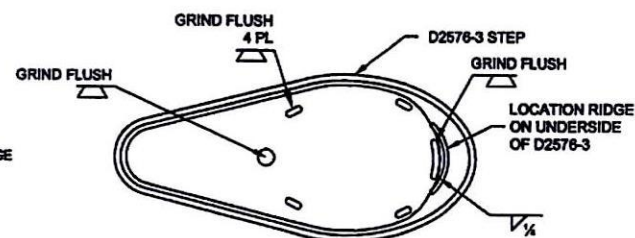


**SECTION F-F  
SCALE 5X**



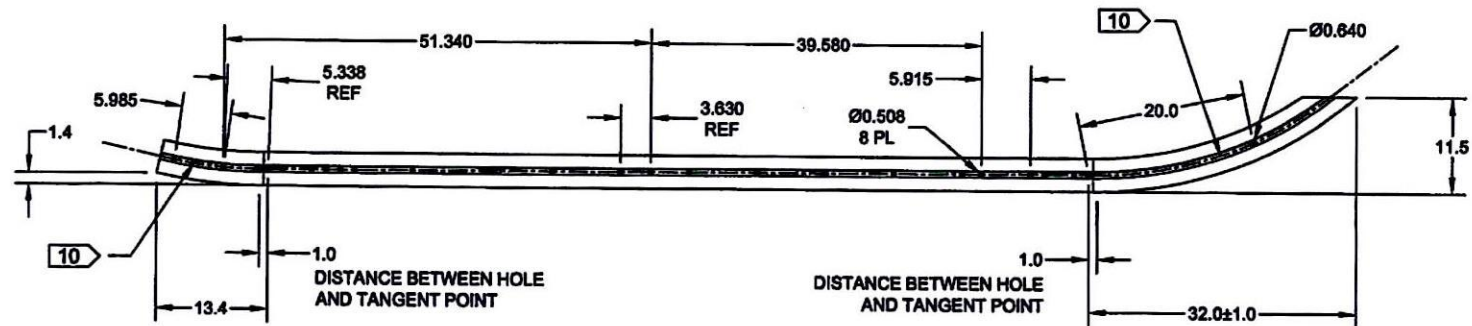
AFTER DRILLING AND BENDING ASSEMBLY  
PERFORM THE FOLLOWING FOR Ø0.508 HOLES ONLY:  
1. INSERT D4202-1 SPACER (20 PLACES)  
2. SWAGE TO Ø0.437 X 1.00 DEEP PER QSI 002  
3. TRIM/GRIND FLUSH PER QSI 002

**DETAIL G  
SCALE 5X**



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|            |                    |                                                                                                                                                                                                                                                              |              |
|------------|--------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|
| DESIGN     | DS                 | <b>DART AEROSPACE LTD</b>                                                                                                                                                                                                                                    |              |
| DRAWN      | SAD                | HAWKESBURY, ONTARIO, CANADA                                                                                                                                                                                                                                  |              |
| CHECKED    | <i>[Signature]</i> | DRAWING NO.                                                                                                                                                                                                                                                  | REV. H       |
| MFG. APPR. | <i>[Signature]</i> | D2580                                                                                                                                                                                                                                                        | SHEET 4 OF 9 |
| APPROVED   | <i>[Signature]</i> | TITLE                                                                                                                                                                                                                                                        | SCALE        |
| DE APPR.   | <i>[Signature]</i> | 205 SKIDTUBE ASSEMBLY                                                                                                                                                                                                                                        | NTS          |
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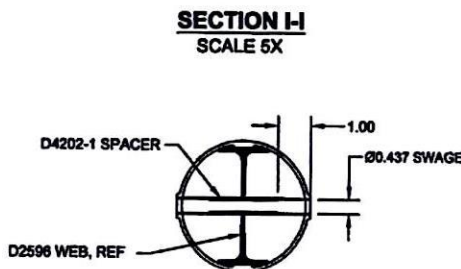
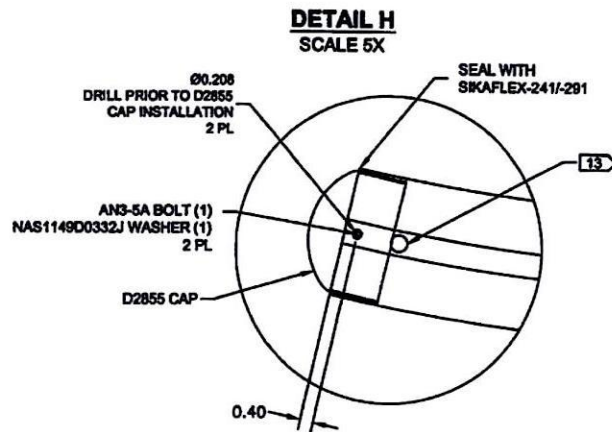
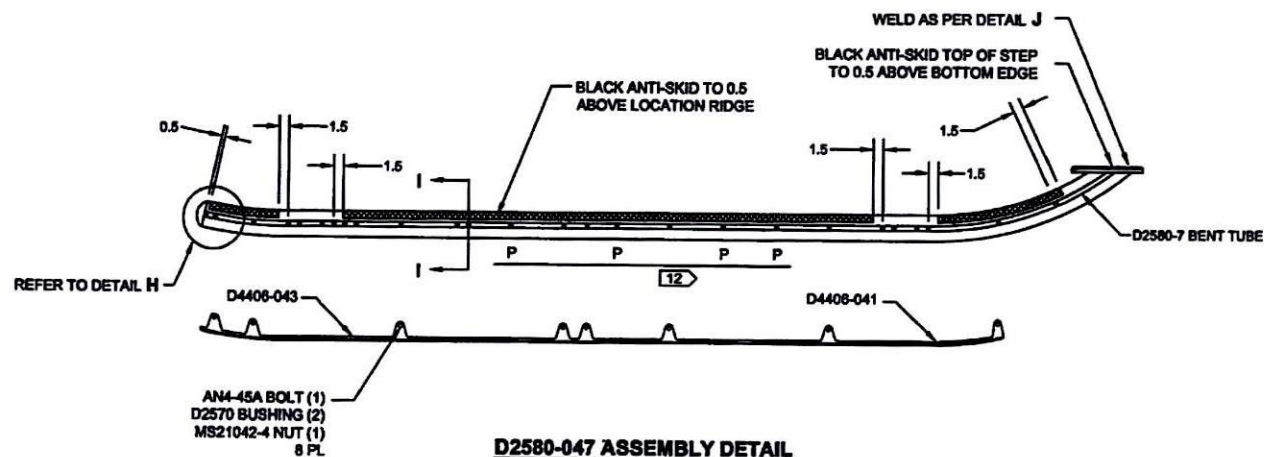
**D2580-5 BENT TUBE**  
(MAKE FROM D2580-101 TUBE)

**RELEASED**

2017 JUL 05

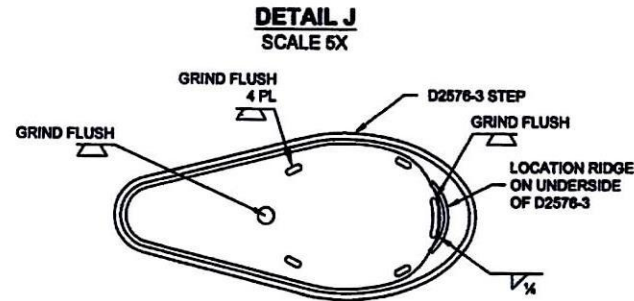
|            |                    |                                                                                                                                                                                                   |                        |
|------------|--------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|
| DESIGN     | DS                 | <b>DART AEROSPACE LTD</b><br>HAWKESBURY, ONTARIO, CANADA                                                                                                                                          |                        |
| DRAWN      | SAD                |                                                                                                                                                                                                   |                        |
| CHECKED    | <i>[Signature]</i> | DRAWING NO.<br>D2580                                                                                                                                                                              | REV. H<br>SHEET 5 OF 9 |
| MFG. APPR. | <i>[Signature]</i> | TITLE<br>205 SKIDTUBE ASSEMBLY                                                                                                                                                                    | SCALE<br>NTS           |
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| DATE       | 17.06.09           |                                                                                                                                                                                                   |                        |





AFTER DRILLING AND BENDING ASSEMBLY  
PERFORM THE FOLLOWING FOR Ø0.508 HOLES ONLY:

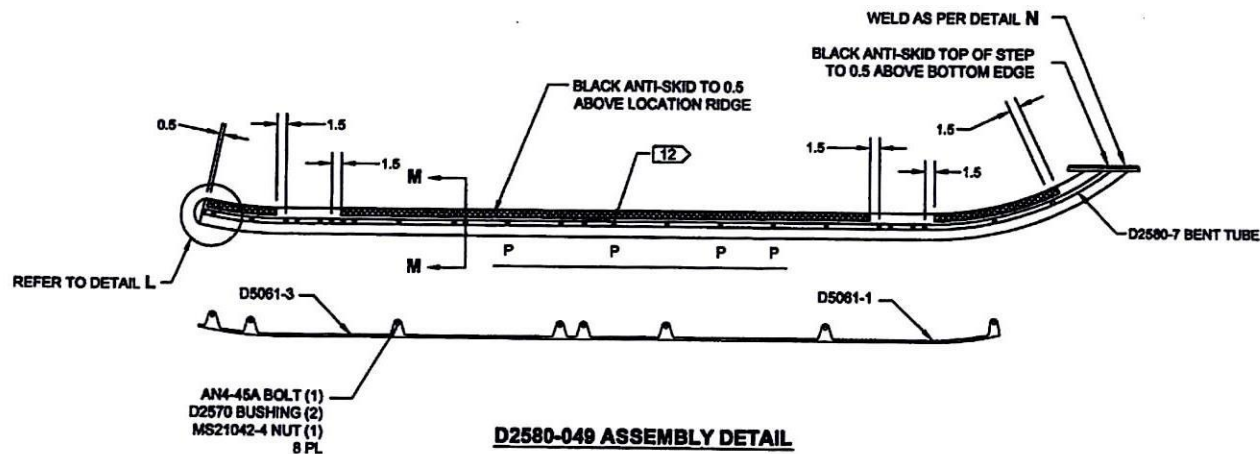
1. INSERT D4202-1 SPACER (24 PLACES)
2. SWAGE TO Ø0.437 X 1.00 DEEP PER QSI 002
3. TRIM/GRIND FLUSH PER QSI 002



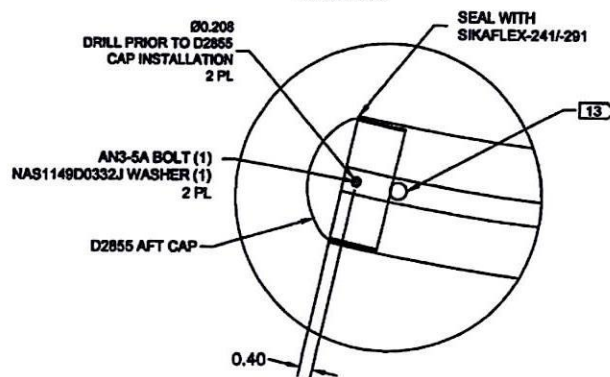
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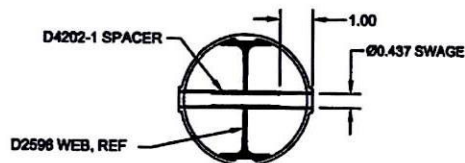
|            |          |                                                                                                                                                                                      |                        |
|------------|----------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|
| DESIGN     | DS       | <b>DART AEROSPACE LTD</b><br>HAWKESBURY, ONTARIO, CANADA                                                                                                                             |                        |
| DRAWN      | SAD      |                                                                                                                                                                                      |                        |
| CHECKED    | 2017     | DRAWING NO.<br>D2580                                                                                                                                                                 | REV. H<br>SHEET 8 OF 9 |
| MFG. APPR. | 2017     | TITLE<br>205 SKIDTUBE ASSEMBLY                                                                                                                                                       | SCALE<br>NTS           |
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| DE APPR.   | 2017     |                                                                                                                                                                                      |                        |
| DATE       | 17.06.09 |                                                                                                                                                                                      |                        |



**DETAIL L**  
SCALE 5X

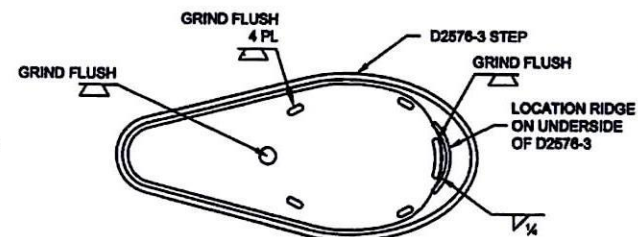


**SECTION M-M**  
SCALE 5X



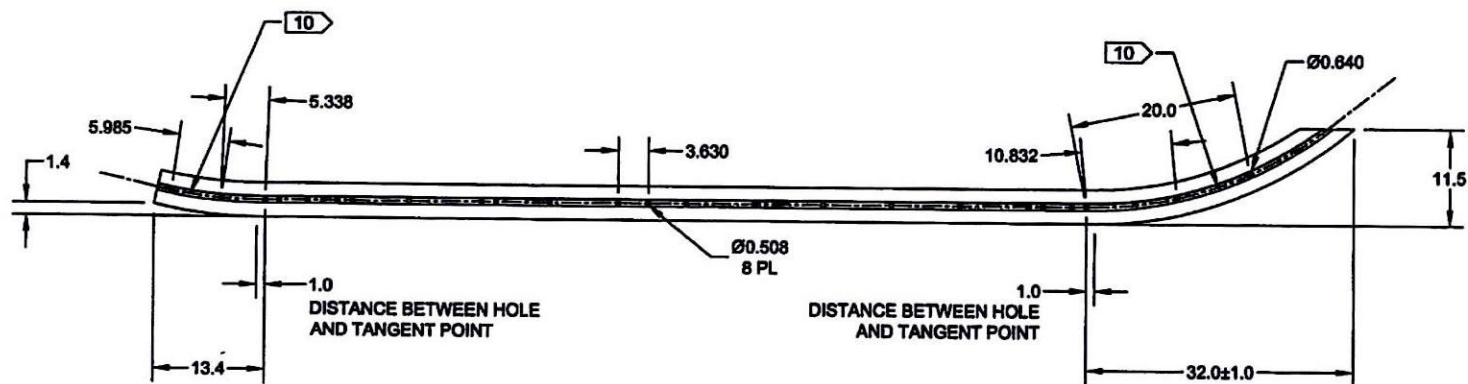
AFTER DRILLING AND BENDING ASSEMBLY  
PERFORM THE FOLLOWING FOR Ø0.508 HOLES ONLY:  
1. INSERT D4202-1 SPACER (24 PLACES)  
2. SWAGE TO Ø0.437 X 1.00 DEEP PER QSI 002  
3. TRIM/GRIND FLUSH PER QSI 002

**DETAIL N**  
SCALE 5X



**RELEASED**  
2017 JUL 05 *up*

|            |                    |                                                                                                                                                                                                                                                                                                      |                        |
|------------|--------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|
| DESIGN     | DS                 | <b>DART AEROSPACE LTD</b><br>HAWKESSBURY, ONTARIO, CANADA                                                                                                                                                                                                                                            |                        |
| DRAWN      | SAD                |                                                                                                                                                                                                                                                                                                      |                        |
| CHECKED    | <i>[Signature]</i> | DRAWING NO.<br>D2580                                                                                                                                                                                                                                                                                 | REV. H<br>SHEET 7 OF 9 |
| MFG. APPR. | <i>[Signature]</i> | TITLE<br>205 SKIDTUBE ASSEMBLY                                                                                                                                                                                                                                                                       | SCALE<br>NTS           |
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| DE APPR.   | <i>[Signature]</i> |                                                                                                                                                                                                                                                                                                      |                        |
| DATE       | 17.06.09           |                                                                                                                                                                                                                                                                                                      |                        |

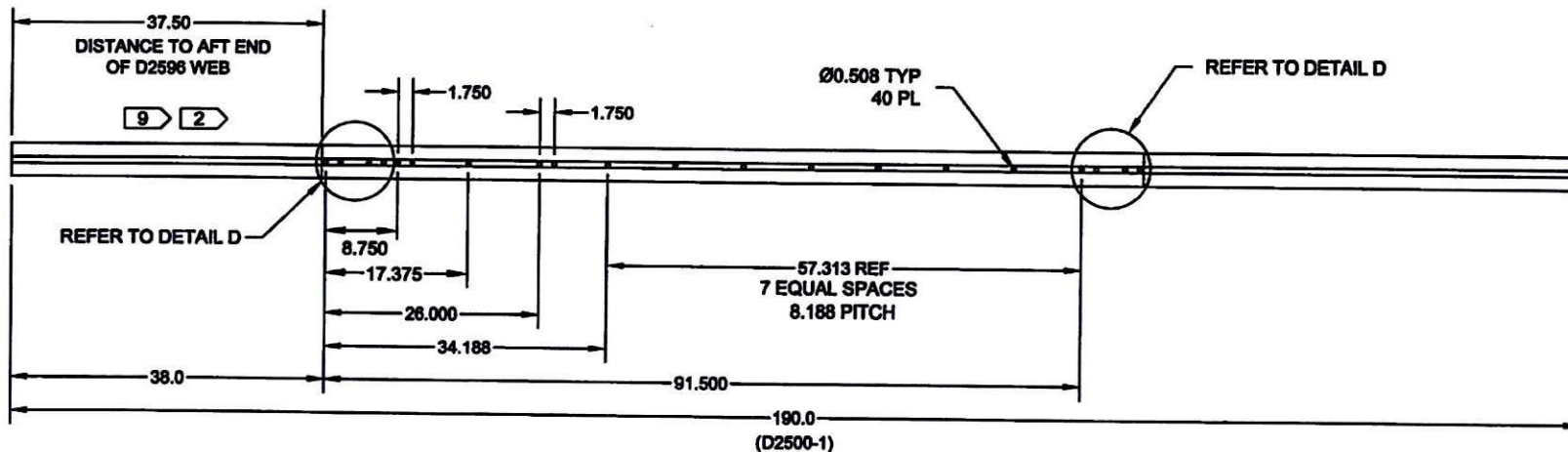


**D2580-7 BENT TUBE**  
(MAKE FROM D2580-101 TUBE)

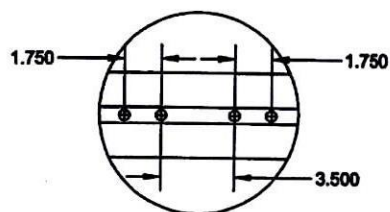
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2017 JUL 05

|            |                    |                                                                                                                                                                                                                                                                                               |              |
|------------|--------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|
| DESIGN     | DS                 | <b>DART AEROSPACE LTD</b><br>HAWKESBURY, ONTARIO, CANADA                                                                                                                                                                                                                                      |              |
| DRAWN      | SAD                |                                                                                                                                                                                                                                                                                               |              |
| CHECKED    | <i>[Signature]</i> | DRAWING NO.                                                                                                                                                                                                                                                                                   | REV. H       |
| MFG. APPR. | <i>[Signature]</i> | D2580                                                                                                                                                                                                                                                                                         | SHEET 8 OF 9 |
| APPROVED   | <i>[Signature]</i> | TITLE                                                                                                                                                                                                                                                                                         | SCALE        |
| DE APPR.   | <i>[Signature]</i> | 205 SKIDTUBE ASSEMBLY                                                                                                                                                                                                                                                                         | NTS          |
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# **D2580-101 TUBE**



**DETAIL D**  
SCALE 5X

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|            |                    |                                                                                                                                                                                                                       |              |
|------------|--------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|
| DESIGN     | DS                 | <b>DART AEROSPACE LTD</b><br>HAWKESBURY, ONTARIO, CANADA                                                                                                                                                              |              |
| DRAWN      | SAD                |                                                                                                                                                                                                                       |              |
| CHECKED    | <i>[Signature]</i> | DRAWING NO.                                                                                                                                                                                                           | REV. H       |
| MFG. APPR. | <i>[Signature]</i> | D2580                                                                                                                                                                                                                 | SHEET 9 OF 9 |
| APPROVED   | <i>[Signature]</i> | TITLE                                                                                                                                                                                                                 | SCALE        |
| DE APPR.   | <i>[Signature]</i> | 205 SKIDTUBE ASSEMBLY                                                                                                                                                                                                 | NTB          |
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